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References

- a. Navigation and Vessel Inspection Circular (NVIC) No. 14-81, "Stability Tests; Waiving of for 'Sister Vessels'"
- b. Marine Safety Manual (MSM), Vol. IV, Chapter 6.D.2

Disclaimer

These guidelines were developed by the Marine Safety Center staff as an aid in the preparation and review of vessel plans and submissions. They were developed to supplement existing guidance. They are not intended to substitute or replace laws, regulations, or other official Coast Guard policy documents. The responsibility to demonstrate compliance with all applicable laws and regulations still rests with the plan submitter. The Coast Guard and the U. S. Department of Transportation expressly disclaim liability resulting from the use of this document.

Contact Information

If you have any questions or comments concerning this document, please contact the Marine Safety Center by e-mail or phone. Please refer to the Procedure Number: **T1-1**

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General Review Guidance

- ☐ If the vessel is new and not a sister vessel, has the Application for Inspection been submitted? In general, no plan review will occur until receipt of a copy of the Application.
- □ Is it clearly stated what is desired from the MSC? Are all plans requiring Coast Guard review and/or approval submitted in triplicate? Are there any special or unusual requests involved?
- Note: Determination of sistership status is for the purposes of waiving stability test requirements and extending previous stability calculations and guidance. Extension of plan approval refers to acceptance of previously reviewed plans for another vessel.

Sistership Determination

□ Determination of sistership status and waiving of stability test requirements is conducted in accordance with references (a) and (b). In general, the MSC will recognize sistership status for new construction vessels, provided that:

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- □ A written certification is made by a responsible officer of the shipbuilding company, as described in reference (a).
- □ Vessels are constructed in the same shipyard, within approximately 2 years of one another.
- □ The same basic drawings are used in the construction of both vessels.
- □ In accordance with references (a) and (b), if the preceding requirements are satisfied, the owner, designer, or shipyard may request that:
 - □ A stability test be waived for the applicable sister vessels (neither an incline or deadweight survey is required), and
 - ☐ The stability guidance be extended from the parent/lead vessel to other sisterships.
- □ Per 46 CFR 170.175(a), the lead or parent vessel of a series must normally be inclined to establish the accepted light ship parameters. For identical or sister vessels to the parent vessel, the stability test may be dispensed with, or a deadweight survey may be substituted for a stability test per 46 CFR 170.175(c). (Note that for most types of barges, detailed weight estimates may be an acceptable substitute for a stability test, in accordance with reference (b) and 46 CFR 170.175(d)).
- □ To establish sister vessel status and extend light ship values and stability guidance from parent to sister vessels, the sister vessels must be certified by the shipyard to be identical to the parent vessel in all respects. "Near" sister vessels (e.g. identical hull forms with some ship's systems modifications) in many cases may not qualify for waiving of a stability test, depending on the extent and known weight/location of modifications. Consult reference (a) if a vessel is nearly identical to the lead/parent ship, and the submitter requests that detailed weight estimates or a deadweight survey be conducted in lieu of an incline stability test.
- □ Sistership status is sometimes claimed between older <u>existing vessels</u>. An example of this type of request is the case when a revised Plan Review Information Sheet (PRIS) is desired for a series of existing tank barges. In these types of cases, the owner/submitter should:
 - □ Provide documentation (such as the original certification made by the shipyard) to establish sistership status.
 - □ Certify that no modifications have been made over the life of the vessels which would cause deviation from original sistership status. This will

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- normally be verified by CG inspectors who will survey the vessels to original construction plans.
- ☐ If adequate documentation is unavailable, then original construction plans and/or other information should be provided to establish sistership status. This information should include general correspondence, and/or general arrangements, tank capacities/locations, and primary hull structural plans.
- □ Upon reviewing the submitted request and determining that sister vessel status is appropriate, the MSC will provide correspondence to the submitter that waives stability test requirements and extends previous stability guidance as appropriate. This may involve drafting a new stability letter for the vessel, or directing ABS to place stability information on the load line certificate. Copies of this correspondence will be forwarded to the OCMI and to ABS Americas, Stability and Load Line Group, if the vessel is load lined.
- □ If the vessels do not meet the criteria listed above for sister vessels, the MSC will provide correspondence to the submitter denying the request for sister vessel status. In the letter, MSC will explain why sister vessel status is not authorized and outline an acceptable procedure that the submitter may follow to establish light ship values and obtain stability approval, considering the guidance in references (a) and (b).

Extension of Plan Approval

- □ In most cases, requests for extension of plan approvals involve the extension of a full set of approved plans for a newly constructed vessel, to one or more vessels that are intended to be identical to the lead vessel in all respects. However, extension of plan approvals does not require the vessels to be identical, nor does it require that a vessel be newly constructed. Closer scrutiny is required if requests are made to extend approvals from more than one reference vessel (e.g. hull structure approval from one vessel, and a mechanical piping system approval from another vessel). Plan approval extensions are generally acceptable provided that the involved vessels have the following attributes:
 - □ Same vessel type and certification (should not extend plan approval from Sub. D tank barge to Sub. O/D tank barge)
 - ☐ The regulations for the original plan approval have not changed since the original approval
 - □ Same cargo authorization
 - □ Authorized for identical routes (e.g. Rivers, Limited Coastwise, etc.)
 - □ The owner of the original plans authorizes their use for new construction

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- ☐ There are no significant modifications made to any of the systems to which the originally approved and extended plans will apply
- □ If requests are made to extend plan approvals for older existing vessels to other existing or new construction vessels, verify that the previously approved plans meet all current regulations (i.e. verify that the applicable rules have remained unchanged in the interim period, since the time of original approval).
- The submitter should clearly indicate the specific Coast Guard approvals that are requested to be extended. Additionally, the submitter should provide copies of all prior approval letters for hull, cargo, machinery, and electrical systems that will be extended to the new vessel(s).
- □ The extension of plan approval will be documented by MSC correspondence, which will specifically reference the original approval letters provided by the submitter. A copy of all referenced approval letters will be returned to the OCMI with the plan extension approval letter.
- □ In general, the MSC will not extend plan approvals made by other organizations on behalf of the U.S. Coast Guard. Such plan extension requests should be forward to the organization that issued the original approvals.

Extension of Plan Approvals for Subchapter O/D Tank Barges

- Plan approval extensions for O/D tank barges require additional considerations due to the nature of Plan Review Information Sheets (PRIS) and cargo authority lists. Failure to address these items can cause confusion and errors for the local inspectors:
 - ☐ In some cases, the submitter may request plan approval extensions from more than one reference vessel (e.g. hull structure approval from one vessel, with vapor recovery system (VCS) approval from another vessel). In these cases, the submitter should ensure that the plans and calculations are compatible/correct for the desired combination of hull and system.
 - □ The submitter should clearly indicate the specific approvals that are requested to be extended. This is especially important in cases where requests are made for plan approvals from more than one reference vessel. Specific approvals of hull, machinery, stability, electrical, and vapor control systems will be clearly indicated on the return correspondence, with copies of the original approval correspondence attached as an enclosure.

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- □ A new PRIS, including a newly generated authorized cargo list, will be provided as an enclosure. In this regard, the submitter may be required to provide a completed cargo tank group characteristics form. (See attached form)
- □ See the attached sample return correspondence letter for a typical O/D tank barge plan approval.

Attachment

- □ Sample correspondence letter for O/D tank barge plan approval extension
- □ Tank Group Characteristics Form